

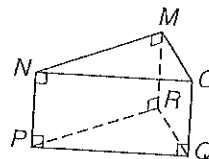
Hon. Geom - Review for Test

Name _____

3.1

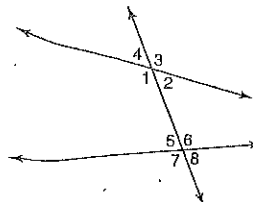
Refer to the figure in the first example.

1. Name two more pairs of parallel segments.
2. Name two more segments skew to \overline{NM} .
3. Name two transversals for parallel lines \overline{NO} and \overline{PQ} .
4. Name a segment that is parallel to plane MRQ .



Identify the special name for each pair of angles in the figure.

5. $\angle 2$ and $\angle 6$
6. $\angle 4$ and $\angle 8$
7. $\angle 4$ and $\angle 5$
8. $\angle 2$ and $\angle 5$



3.3

Find the slope of the line passing through the given points.

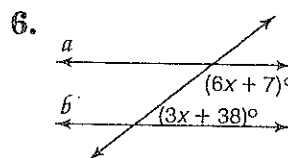
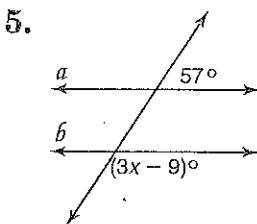
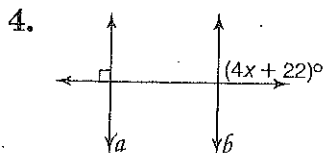
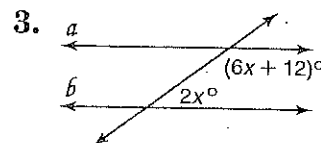
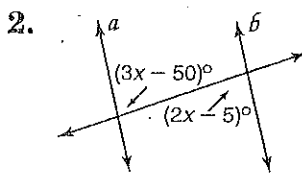
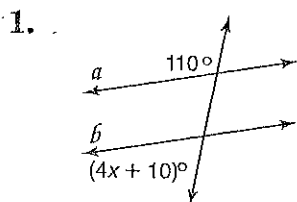
1. $C(-2, -4), D(8, 12)$
2. $J(-4, 6), K(3, -10)$
3. $P(0, 12), R(12, 0)$

Find the slope of the line parallel to the line passing through each pair of points. Then state the slope of the line perpendicular to the line passing through each pair of points.

7. $I(9, -3), J(6, -10)$
8. $G(-8, -12), H(4, -1)$
9. $M(5, -2), T(9, -6)$

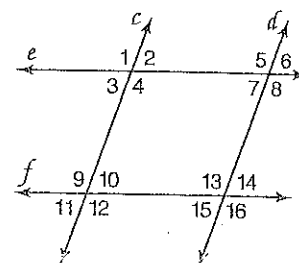
3.4

Find the value of x so that $a \parallel b$.



Given the following information, determine which lines, if any, are parallel. State the postulate or theorem that justifies your answer.

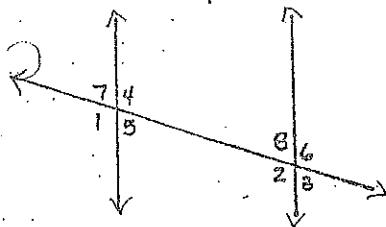
7. $\angle 1 \cong \angle 8$
8. $\angle 4 \cong \angle 9$



9. $m\angle 7 + m\angle 13 = 180$
10. $\angle 9 \cong \angle 13$

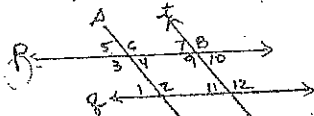
3.4

Prove's
① Given: $\angle 3$ is supplemental to $\angle 4$
Prove: $l \parallel m$



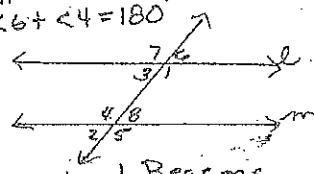
Statements	Reasons
① $\angle 3$ is supp to $\angle 4$	⑨
② $\angle 3 + \angle 4 = 180$	⑩ def of supplementary
③ $\angle 3 \cong \angle 6$	⑪
④ $\angle 6 + \angle 4 = 180$	⑫
⑤ $\angle 6$ is supplemental to $\angle 4$	⑬
⑥ $l \parallel m$	⑭

② Given: $p \parallel q$, $s \parallel t$
Prove: $\angle 1 \cong \angle 7$



Statements	Reasons

③ Given: $l \parallel m$
Prove: $\angle 6 + \angle 4 = 180$



Statements	Reasons
1) $l \parallel m$	1) Given
2) $\angle 6 \cong \angle 2$	2) $\angle 6 \cong \angle 2$
3) $\angle 4 + \angle 2$ are supplementary	3) $\angle 4 + \angle 2$ are supplementary
4) $\angle 6 + \angle 4 = 180$	4) def of suppl.
5) $\angle 6 + \angle 4 = 180$	5) $\angle 6 + \angle 4 = 180$

Solve each system.

④ $3x + 6y = -6$
 $5x - 2y = 14$

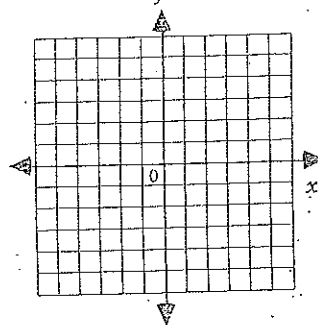
⑤ $5x - 2y = 0$
 $2x - 3y = -11$

Solve by factoring

⑥ $x^2 + 7x - 18 = 0$

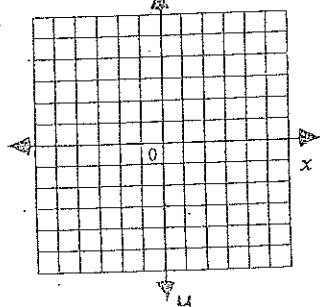
⑦ $x^2 + x - 56 = 0$

⑨ Sketch the line $y = \frac{1}{2}x + 3$
Sketch the line passing through $(-3, 6)$ that represents the distance



⑧ $x^2 - 14x + 48 = 0$

⑩ Sketch the line passing through $(3, 2)$ and \perp to the line containing $(-4, 7)$, $(1, 8)$



⑪ Graph: 1) $2y = 3x - 6$
2) $y = 3$

